

### AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior listings and versions:

1. (currently amended): A method for selecting a dimerizing ~~test~~ polypeptide, comprising:  
~~introducing a DNA library into~~ providing a population of host cells ~~under conditions~~ wherein each host cell contains
  - (a) a chimeric gene which encodes a fusion protein, including one or more DNA-binding domains, an activation domain, and a test polypeptide,
  - (b) a reporter gene operably linked to a transcriptional regulatory sequence which includes two or more binding sites (DBD recognition elements) for the DNA-binding domain of (a), wherein binding of a single copy of the fusion protein to the transcriptional regulatory sequence of the reporter gene does not result in a desired level of expression of the reporter gene;wherein dimerization of two copies of the fusion protein to each other and binding of the dimerized fusion protein to the transcriptional regulatory sequence of the reporter gene results in a desired level of expression of the reporter gene; and  
isolating host cells exhibiting a desired level of expression of the reporter gene thereby selecting a dimerizing ~~test~~ polypeptide.
2. (original): The method of claim 1, wherein the host cell further comprises a second reporter gene operably linked to a transcriptional regulatory sequence comprising one binding site for the DNA binding domain of (a).
3. (currently amended): The method of claim 1, further comprising isolating a polynucleotide comprising a sequence encoding the dimerizing ~~test~~ polypeptide.
4. (currently amended): The method of claim 3, further comprising linking the sequence encoding the dimerizing ~~test~~ polypeptide to a heterologous sequence.
5. (original): The method of claim 1, wherein the host cell is a prokaryotic host cell.
6. (original): The method claim 1, wherein the desired level of expression of the reporter gene confers a growth advantage on the host cell.

7. (original): The method of claim 1, wherein the desired level of expression of the reporter gene produces a detectable signal.

8. (original): The method of claim 1, wherein the chimeric gene is a member of a library comprising a plurality of sequences encoding for random test polypeptides.

9. (original): The method of claim 8, wherein the library comprises at least  $10^7$  members.

10 to 20. (canceled).